

IFW16

## RAW SEQUENCE LISTING

DATE: 09/29/2004

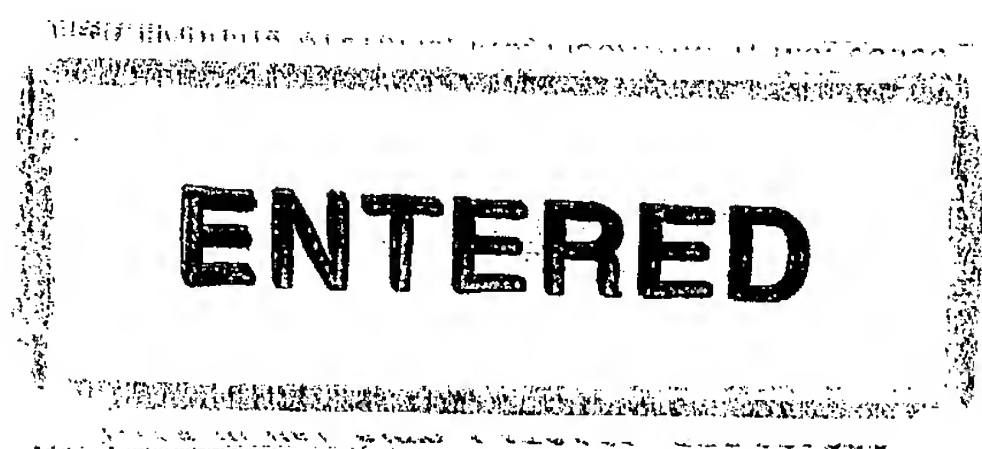
PATENT APPLICATION: US/10/072,077B

TIME: 11:45:23

Input Set : A:\Uco-1215.app

Output Set: N:\CRF4\09292004\J072077B.raw

3 <110> APPLICANT: Gallie, Daniel R.  
 4 Young, Todd E.  
 5 The Regents of the University of California  
 7 <120> TITLE OF INVENTION: Generation of Multiple Embryo Maize  
 9 <130> FILE REFERENCE: 023070-121500US  
 11 <140> CURRENT APPLICATION NUMBER: US 10/072,077B  
 12 <141> CURRENT FILING DATE: 2002-02-07  
 14 <160> NUMBER OF SEQ ID NOS: 2  
 16 <170> SOFTWARE: PatentIn Ver. 2.1  
 18 <210> SEQ ID NO: 1  
 19 <211> LENGTH: 3183  
 20 <212> TYPE: DNA  
 21 <213> ORGANISM: Arabidopsis thaliana  
 23 <220> FEATURE:  
 24 <221> NAME/KEY: promoter  
 25 <222> LOCATION: (1)..(3183)  
 26 <223> OTHER INFORMATION: senescence-associated gene 12-1 (SAG12-1) promoter  
 28 <400> SEQUENCE: 1  
 29 gatatctctt tttatattca aacaataagt tgagatatgt ttgagaagag gacaactatt 60  
 30 ctcgtggagc accgagtctg ttttatatta gaaacccgat tggtattttt agactgagac 120  
 31 aaaaaagtaa aatcgttgat tgttaaaatt taaaattagt ttcatcacgt ttcgataaaa 180  
 32 aatgattag ttatcatagc taatatagca tgattctaaa tttgtttttt gacacccttt 240  
 33 ttttctctct ttgggtgttt cttaacatta gaagaacca taacaatgta cgttcaaatt 300  
 34 aattaaaaac aatattttcca agttttatat acgaaacttg tttttttaat gaaaacagtt 360  
 35 gaatagttga ttatgaatta gttagatcaa tactcaatat atgatcaatg atgtatatat 420  
 36 atgaactcag ttgttataca agaaatgaaa atgctattta aataccgatc atgaagtgtt 480  
 37 aaaaagtgtc agaatatgac atgaagcgtt ttgtcctacc gggatcagag ttataggttt 540  
 38 ggatctctca agaataattt gggccatatt agttatatat gggcttaage gttttgcaaa 600  
 39 gagacgagga agaaagattg ggtcaagtta acaaaacaga gacactcgta ttagttggta 660  
 40 ctttggttagc aagtcgattt atttgccagt aaaaacttgg tacacaactg acaactcgta 720  
 41 tcgttattag tttgtacttg gtacctttgg ttaagaaaaa gttgatatag ttaaatacagt 780  
 42 tgtgttcacg aggtgattgt gatttaattt gttgactagg gcgattcctt cacatcacia 840  
 43 taacaaagtt ttatagattt ttttttataa catttttgcc acgcttcgta aagtttggtt 900  
 44 tttacaccgc atttttccct gtacaagaat tcatatatta tttatttata tactccagtt 960  
 45 gacaattata agttttataac gttttttacaa ttattttaaat accatgtgaa gatccaagaa 1020  
 46 tatgtcttac ttcttctttg tgtaagaaaa ctaactatat cactataata aaataattct 1080  
 47 aatcattata tttgtaaata tgcagttatt tgtcaatttt gaatttagta ttttagacgg 1140  
 48 ttatcacttc agccaaatat gatttggatt taagtccaaa atgcaatttc gtacgtatcc 1200  
 49 ctcttgctcg ctaatgatta tttcaatatt tcttatatta tccttaacta cagagctaca 1260  
 50 tttatattgt attctaataa cagggaaact ttcataagaga ttcagataga tgaaattggg 1320  
 51 gggaaacatc attgaacagg aaacttttag caaatcatat cgatttatct acaaaagaat 1380  
 52 acttagcgta atgaagttca cttgttgtga atgactatga tttgatcaaa ttagttaatt 1440  
 53 ttgtcgaatc atttttcttt ttgatttgat taagctttta acttgcacga atggttctct 1500



## RAW SEQUENCE LISTING

DATE: 09/29/2004

PATENT APPLICATION: US/10/072,077B

TIME: 11:45:23

Input Set : A:\Uco-1215.app

Output Set: N:\CRF4\09292004\J072077B.raw

```

54 tgtgaataaa cagaatcttt gaattcaaac tatttgatta gtgaaaagac aaaagaagat 1560
55 tccttgtttt tatgtgatta gtgattttga tgcataaag gtacctacgt actacaagaa 1620
56 aaataaacat gtacgtaact acgtatcagc atgtaaaagt atttttttcc aaataattta 1680
57 tactcatgat agattttttt tttttgaaat gtcaattaaa aatgctttct taaatattaa 1740
58 ttttaattaa tttaaataagg aaatatattt atgcaaaaca tcatcaacac atatccaact 1800
59 tcgaaaatct ctatagtaca caagtagaga aaataaattt tactagatac aaacttccta 1860
60 atcatcaatt ataaatgttt acaaaaactaa ttaaaccac cactaaaatt aactaaaaat 1920
61 ccgagcaaag tgagtgaaca agacttgatt tcagggtgat gtaggactaa aatggctacg 1980
62 tatcaaacat caacgatcat ttagttatgt atgaatgaat gtagtcatta cttgtaaaac 2040
63 aaaaatgctt tgatttggat caatcacttc atgtgaacat tagcaattac atcaacctta 2100
64 ttttcactat aaaaccccat ctcagtacc cttctgaagta atcaaattaa gagcaaaagt 2160
65 catttaactt tcctaaaacc atggaccctg catctaattt tcggtccaac ttgcacagga 2220
66 aagacgacga ccgcgatagc tcttgcccag cagacagggc ttccagtcct ttgccttgat 2280
67 cgggtccaat cgtgtcctca actatcaacc ggaagcggac gaccaacagt ggaagaactg 2340
68 aaaggaacga cgcgtctcta ccttgatgat cggcctctgg tggagggtat catcgcagcc 2400
69 aagcaagctc atcataggct gatcgaggag gtgtataatc atgaggccaa cggcgggctt 2460
70 attcttgagg gaggatccac ctcgttgctc aactgcatgg cgcgaaacag ctattggagt 2520
71 gcagattttc gttggcatat tattcgccac aagttaccgc accaagagac cttcatgaaa 2580
72 gcggccaagg ccagagttaa gcagatgttg caccgcgtg caggccattc tattattcaa 2640
73 gagttggttt atctttggaa tgaacctcgg ctgaggccca ttctgaaaga gatcgatgga 2700
74 tatcgatatg ccatgttggt tgctagccag aaccagatca cggcagatat gctattgcag 2760
75 cttgacgcaa atatggaagg taagttgatt aatgggatcg ctcaggagta tttcatccat 2820
76 gcgcgccaac aggaacagaa attcccccaa gttaacgcag ccgctttcga cggattcgaa 2880
77 ggtcatccgt tcggaatgta ttaggttacg ccagccctga gctcgatcgt tcaaacattt 2940
78 ggcaataaag tttcttaaga ttgaatcctg ttgccggtct tgcgatgatt atcatataat 3000
79 ttctgttgaa ttacgttaag catgtaataa ttaacatgta atgcatgacg ttattttatga 3060
80 gatgggtttt tatgattaga gtcccgaat tatacattta atacgcgata gaaaacaaaa 3120
81 tatggcgcgc aaactgggat aaattatcgc gcgcggtgtc atctatgtta ctagatcgaa 3180
82 ttc 3183

```

85 &lt;210&gt; SEQ ID NO: 2

86 &lt;211&gt; LENGTH: 240

87 &lt;212&gt; TYPE: PRT

88 &lt;213&gt; ORGANISM: Agrobacterium tumefaciens

90 &lt;220&gt; FEATURE:

91 &lt;223&gt; OTHER INFORMATION: isopentenyl transferase

93 &lt;400&gt; SEQUENCE: 2

```

94 Met Asp Leu Arg Leu Ile Phe Gly Pro Thr Cys Thr Gly Lys Thr Ser
95   1           5           10           15
96 Thr Ala Val Ala Leu Ala Gln Gln Thr Gly Leu Pro Val Leu Ser Leu
97           20           25           30
98 Asp Arg Val Gln Cys Cys Pro Gln Leu Ser Thr Gly Ser Gly Arg Pro
99           35           40           45
100 Thr Val Glu Glu Leu Lys Gly Thr Ser Arg Leu Tyr Leu Asp Asp Arg
101           50           55           60
102 Pro Leu Val Lys Gly Ile Ile Ala Ala Lys Gln Ala His Glu Arg Leu
103           65           70           75           80
104 Met Gly Glu Val Tyr Asn Tyr Glu Ala His Gly Gly Leu Ile Leu Glu
105           85           90           95
106 Gly Gly Ser Ile Ser Leu Leu Lys Cys Met Ala Gln Ser Ser Tyr Trp

```

## RAW SEQUENCE LISTING

DATE: 09/29/2004

PATENT APPLICATION: US/10/072,077B

TIME: 11:45:23

Input Set : A:\Uco-1215.app

Output Set: N:\CRF4\09292004\J072077B.raw

107		100		105		110
108	Ser Ala Asp	Phe Arg Trp His	Ile Ile Arg His	Glu Leu Ala Asp	Glu	
109		115		120		125
110	Glu Thr Phe	Met Asn Val Ala	Lys Ala Arg Val	Lys Gln Met Leu	Arg	
111		130		135		140
112	Pro Ala Ala	Gly Leu Ser Ile	Ile Gln Glu Leu	Val Asp Leu Trp	Lys	
113	145		150		155	160
114	Glu Pro Arg	Leu Arg Pro Ile	Leu Lys Glu Ile	Asp Gly Tyr Arg	Tyr	
115		165		170		175
116	Ala Met Leu	Phe Ala Ser Gln	Asn Gln Ile Thr	Ser Asp Met Leu	Leu	
117		180		185		190
118	Gln Leu Asp	Ala Asp Met Glu	Asp Lys Leu Ile	His Gly Ile Ala	Gln	
119		195		200		205
120	Glu Tyr Leu	Ile His Ala Arg	Arg Gln Glu Gln	Lys Phe Pro Arg	Val	
121		210		215		220
122	Asn Ala Ala	Ala Tyr Asp Gly	Phe Glu Gly His	Pro Phe Gly Met	Tyr	
123	225		230		235	240

VERIFICATION SUMMARY

DATE: 09/29/2004

PATENT APPLICATION: US/10/072,077B

TIME: 11:45:24

Input Set : A:\Uco-1215.app

Output Set: N:\CRF4\09292004\J072077B.raw